## CITY OF RIVERSIDE

9172 9176

## **HUMAN RESOURCES DEPARTMENT**

07/01/95 Revised

## **CLASSIFICATION SPECIFICATION**

TITLE:

# NETWORK SUPPORT SPECIALIST SENIOR NETWORK SUPPORT SPECIALIST

#### **DEFINITION**

Positions in this series perform a variety of specialized and technical work in the following areas: network administration; hardware, software and data communications support; data base administration/data management; contract administration; training and technology support/planning; budget/purchasing; systems analysis; and customized applications programming for mini and micro computers.

#### **DISTINGUISHING CHARACTERISTICS**

The Network Specialist Series primarily performs technical work involving network administration and hardware and software support for mini and micro computers. Classifications in this series are generally distinguished by the size, complexity, and variety of computer systems they are managing. This series is distinguished from the Systems Analyst Series which primarily performs programming and analytical work within the operating system environment and data base administration for mainframe and mini computers. This series is also distinguished from the Programmer Analyst Series which primarily performs applications programming and analytical work involving systems software.

#### **CLASS CHARACTERISTICS**

Network Support Specialist: This is the entry/journey level classification in the Network Support Specialist Series. Positions in this class initially perform specialized and technical work of routine complexity. As experience is gained, incumbents are expected to perform more technical assignments of moderate complexity and use independent judgment in dealing with problems and implementing solutions. Incumbents may be responsible for managing a large and complex system or may assist in the administration of multiple, less difficult, systems. Generally, work is reviewed both during its performance and upon completion. Impact of decisions are considerable and contacts are typically with peers at similar levels within and outside the organization. Work may be performed under the direction of a Senior Network Support Specialist or other higher level management employee.

Senior Network Support Specialist: This is the advanced journey level classification in the Network Support Specialist Series. Positions in this class perform specialized and technical work assignments of a complex and difficult nature. Incumbents are expected to apply broad knowledge and experience in computer systems administration to managing multiple large, complex, multi-user, and multi-platform systems. Incumbents in these positions have greater responsibility and a larger span of control than positions in the lower level class, and use independent judgment in solving overall system problems. Impact of decisions are significant and contacts are diverse including upper level management and external contacts. Positions in this class have regular responsibility for the more complex, long-term projects requiring greater technical expertise. Incumbents may function as a section head responsible for departmental computer-related functions and activities or may serve as an independent contributor in providing the most skilled technical expertise to various departments on a centralized city-wide basis. Incumbents in these positions typically serve as project team leaders and may serve in a lead capacity over lesser skilled Network Support Specialists.

#### **REPORTS TO:**

**Network Support Specialist:** Senior Network Support Specialist or other higher level management employee, as assigned.

Senior Network Support Specialist: Higher level management, as assigned.

### SUPERVISION RECEIVED AND EXERCISED

**Network Support Specialist:** Incumbents initially receive close supervision from a Senior Network Support Specialist or higher level management employee. As experience is gained, incumbents receive general supervision. Network Support Specialists may provide lead direction on a project basis over lesser skilled technical staff.

**Senior Network Support Specialist:** Incumbents receive general supervision from higher level management. Senior Network Support Specialists may supervise or provide lead direction on a project basis over Network Support Specialists and/or lesser skilled technical staff.

#### **EXAMPLES OF DUTIES**

Duties may include, but are not limited to the following, depending on assignment:

#### All levels:

- Serve as a resource in information systems technology; keep abreast of emerging technologies; evaluate, select, and recommend new technologies and/or products to enhance employee productivity and/or network/work station performance; develop and maintain a formal short-term and long-range plan.
- Participate in developing, monitoring, and administering a departmental, division, or section budget in the area
  of computer resources; coordinate the preparation of requisitions, justifications, and budget transfers for
  computer-related purchases.
- Install and maintain network hardware and operating systems; add new users, and directories; implement security; troubleshoot network usage; perform system backups, data recovery, and archiving; perform disaster recovery planning.
- Implement solutions to problems related to the common use of data by different divisions within the department and develop compatible systems.
- Install, support, and troubleshoot micro computer hardware, firmware, printers, peripherals, scanners, external storage devices, and related equipment.
- Install, support, and troubleshoot micro computer software including word processors, spreadsheets, presentation graphics, data base management, electronic mail, fax, operating, and custom applications.
- Review established programs to refine procedures and make modifications to reduce operating time and costs.
- Evaluate, select, install, and maintain data communications software, hardware, and networks including
  network communications gateway, remote dial-up use and support, network bridges and routers, high speed
  modems, communication lines, leased and dial-up telephone lines; may perform specialized support of
  multiple and unique telemetry systems.
- Administer and support large and complex data base resources; use data base utility software to insure data
  integrity and security, recover corrupted data, and eliminate data redundancy; generate special reports as
  requested.
- Serve as the liaison with various technical vendors; oversee the administration of vendor contracts.
- Train and/or coordinate training of personnel in proper procedures and techniques for user equipment and programs.

## The Senior Network Support Specialist, in addition to the above duties, will also perform the following, depending upon assignment:

- Supervise and participate as a project team leader; instruct, direct, review, and evaluate work of project team; assign tasks and provide general and technical guidance to team members.
- Develop action plans; prepare and monitor activity reports on the team's progress.
- · Conduct informal training and provide guidance to lesser skilled Network Support Specialists.
- Perform detailed analysis of existing processes and determine the feasibility and application of automation techniques to provide a more effective and efficient process.
- · Consult with system users to define needs and general and detailed specifications of proposed systems.
- Translate system specifications into a logical process and design; develop customized programs using current programming tools/languages.
- Design testing methods and test completed programs and procedures for accuracy and completeness to ensure that system requirements are met.

#### **QUALIFICATIONS**

## Knowledge of:

#### All levels:

- Operating principles, procedures, and characteristics of mini and micro computers and related equipment.
- Principles and practices of network administration and data communications.
- Basic principles and techniques of programming and programming languages related to specialized hardware and/or software.
- Mini and micro computer systems operations and related system and applications software and terminology.
- Operating, diagnosing, troubleshooting, and general maintenance/repair standards of mini and micro computers and peripherals.
- Principles and techniques of procedures analysis, design, program ming, documentation, and testing for micro computer systems.
- Standard business applications including spreadsheets, word processing, data base management, and graphics.

## Senior Network Support Specialist:

- Advanced principles and techniques of network administration, systems analysis, and programming for micro computer systems.
- Multiple advanced software applications, utility tools, and programming languages.
- Principles and practices of supervision, training, and evaluation.
- Research techniques, methods, and procedures; project management.
- Administration principles and practices of goal setting; program development and implementation; budget development; and planning and organization.

## Ability to:

#### All levels:

- Evaluate, select, and recommend new technologies and/or products to enhance employee/equipment performance.
- Prepare system requirements, hardware/network configurations, design specifications, and implement programs as required.
- Install, maintain, and troubleshoot network, operating system, and related equipment.
- Install, support, and troubleshoot mini and micro computer and data communications hardware, firmware, software, and peripherals.
- Administer and support data base resources ensuring data integrity and security; perform data recovery and archiving.
- Monitor the day to day computer operations; develop departmental operational procedures and standards and/or participate in developing city-wide operational procedures and standards.
- · Maintain technical libraries and documentation files.
- Communicate clearly and concisely, orally, and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Train employees in system/equipment use and preventative maintenance.

## Senior Network Support Specialist:

- Act as a team leader; assign, review, and evaluate the work of others, to ensure accuracy and efficiency of computer and automation applications.
- Develop and implement long-range and short-term plans and goals; develop and administer a budget.
- Manage large and complex networks and computer systems and resolve the most difficult computer-related problems.
- Plan, organize, and prioritize projects.
- Conduct systems and procedures analysis and feasibility studies; analyze data and develop logical and cost effective solutions to problems.
- Utilize multiple advanced software applications, utility tools, and programming languages within the micro or mini computer environment.

## **Education and Experience:**

Any combination of experience and education that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

## Network Support Specialist:

#### Education:

Equivalent to an Associate degree from an accredited college or university with major work in computer science, computer information, data processing, or a closely related field. One year of additional qualifying experience may substitute for one year of education.

#### Experience:

A range of 1-2 years of experience in a variety of specialized and technical work involving mini and micro computers in the following areas: network administration; hardware, software, and data communications support; data base administration/data management; contract administration; training and technology support/planning; and budget/purchasing.

## Senior Network Support Specialist:

Education: Equivalent to a Bachelor's degree from an accredited college or university with major work in

computer science, computer information, data processing, or a closely related field. Two years of

additional qualifying experience may substitute for two years of education.

Experience: A range of 2-3 years of advanced-level experience in a variety of specialized and technical work

involving mini and micro computers in the following areas: network administration; hardware, software, and data communications support; data base administration/data management; contract administration; training and technology support/planning; and budget/purchasing. At least one year of the required experience must include administration of large, complex, multi-user, and

multi-platform systems.

MEDICAL CATEGORY: Group 1

## **CAREER ADVANCEMENT OPPORTUNITIES**

FROM: Network Support Specialist

TO: Senior Network Support Specialist, Senior Systems Analyst, Senior Programmer Analyst

TO: Network Support Supervisor, Principal Programmer Analyst